

Theoretical Review of Phonics Instruction for Struggling/Beginning Readers of English

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Abstract

Learning to read is a complex task for beginners of English. They must coordinate many cognitive processes to read accurately and fluently, including recognizing words, constructing the meanings of sentences and text, and retaining the information read in memory. An essential part of the process for beginners involves learning the alphabetic system, including, letter-sound correspondences and spelling patterns, and learning how to apply this knowledge in their reading (National Reading Panel, 2000). Systematic phonics instruction is a way of teaching reading that stresses the acquisition of letter-sound correspondences and their use to read and spell words (Harris & Hodges, 1995). Although phonics instruction is primarily designed for L1 beginners in the primary grades and for children having difficulty learning to read, it can be applied to L2 learners to make use of sound-symbol, vocabulary, and meaning to decode and comprehend texts (Bernhardt, 2000). This paper reviews critical notions in regard to phonics instruction in order to

provide sufficient background information for those new in this topic. Some useful pedagogical instructions are also presented, which could be applied to L2 learners.

Keywords: phonics instruction, struggling/beginning readers, phonemic awareness, phonological awareness

Theoretical Basis

The recent years' acrimonious debate about beginning reading instruction, especially at the first-grade level, is consistent with a half century of dispute about what works best in developing young readers (Adams, 1990; Chall, 1967). Much of the current first grade debate has been between those who favor explicit instruction of beginning reading skills, especially the teaching of phonics, and those who favor an approach playing down systematic instruction in favor of immersion in literacy tasks, the whole language philosophy. Those who favor a skills instruction emphasis can point out to demonstrations in true experiments that intense teaching of decoding skills to children experiencing difficulties with word recognition increases their performance on standardized measures of word recognition or reading. In education, particularly, in the teaching of reading over the years, the choice of instruction methods has been heavily influenced by many factors, not only teachers' own frontline experiences about what works, but also politics, economics, and the popular wisdom of the day (National Reading Panel, 2000). Meanwhile, substantial scientific evidence has accumulated purporting to shed light on reading acquisition processes and effective instructional approaches (Adams, 1990; Snow, Burns, & Griffin, 1998).

Today, phonics instruction receives much attention when educators discuss the ingredients of effective programs to teach children to read. Research of more than two decades has affirmed

the importance of phonological awareness and its relation to reading acquisition. Reviews of the literature (Hurford, Darrow, Edwards, Howerton, Mote, Schauf, & Coffey, 1993) indicated that the presence of phonological awareness is a hallmark characteristic of good readers while its absence is a consistent characteristic of poor readers. In short, difficulties with awareness, coding, and retrieval of verbal sounds have powerful and long-reaching effects in reading. However, the most encouraging lines of research give strong evidence that significant gains in phonological awareness can be achieved with teaching and that the gains in phonological awareness directly affect the ease of reading acquisition and subsequent reading achievement (Smith, Simmons, & Kameenui, 1998).

It is thus important and interesting to review phonics instruction so that reading teachers will learn more out of it and determine whether this instruction lives up to these claims. From this article, readers will identify circumstances that govern its effectiveness to base the information as a stepping stone to extend it for possible future research projects. Moreover, there are additional reasons why phonics instruction is selected for review in this project. Many studies investigating the effectiveness of phonemic awareness instruction have contributed to this body of evidence. Proponents believe that this research holds promise of placing reading instruction on a more solid footing and ending the periodic upheavals and overhauls of reading instructional practices (National Reading Panel, 2000). According to the report of the National Reading Panel (2000), correlational studies have identified phonemic awareness and letter knowledge as the two best school-entry predictors of how well children will learn to read during their first 2 years in school. This evidence suggests the potential instructional importance of teaching phonemic awareness to children. In addition, many experimental studies have evaluated the effectiveness of phonemic awareness instruction in

facilitating reading acquisition. Results are claimed to be positive and to provide a scientific basis documenting the efficacy of phonemic instruction (National Reading Panel, 2000). Although these studies are basically related to reading in L1, prior research shows that when L1 and L2 learners learn a second language, they use similar strategies when they read (Gass, & Selinker, 2001). To illustrate, they appear to make use of sound-symbol, vocabulary, meaning, language structure and background and textual knowledge to decode and comprehend texts (Bernhardt, 2000).

The above information describes the broad concept of the evolution of phonics instruction. However, more details of the theoretical basis of the technique will also be discussed throughout this report.

Definitions of Important Terms

Phonics

Phonics has been called one among many cues used in reading (e.g., Dahl, Sharer, Lawson, & Grogan, 1999). It refers to instructional practices that emphasize how spellings are related to speech sounds in systematic ways (Snow, Burns, & Griffin, 1998). By this definition, phonics instruction is found in many different types of reading programs (Routman, 1998). Stahl (2001) defines phonics instruction as any approach in which the teacher does/says something to help children learn how to decode words. This may involve teaching sound-symbol correspondences directly, having children manipulate sounds in written words through spelling tasks, pointing out patterns in similarly spelled words, or anything else which helps children learn about orthographic patterns in written language. Common forms of phonics instruction in the 1960s included synthetic phonics instruction, analytic instruction, and “linguistic” readers (Aukerman, 1981). By the 1990s, there were new approaches to phonics instruction,

based on constructivist principles. These approaches—spelling-based approaches such as Making Words (Cunningham & Cunningham, 1998) or Word Study (Bear, Templeton, Invernizzi, & Johnston, 1996), embedded phonics approaches (Hiebert, Colt, Catto, & Gary, 1992), and compare/contrast or analogy-based approaches—all involved children in active construction of knowledge about orthographic patterns.

Phonemes/ Phonemic Awareness

According to the National Reading Panel (2000), phonemes are the smallest units constituting spoken language. English consists of about 41 phonemes. Phonemes combine to form syllables and words. A few words have only one phoneme, such as a or oh. Most words consist of a blend of phonemes, such as go with two phonemes, or check with three phonemes, or stop with four phonemes. Phonemes are different from graphemes, which are units of written language and which represent phonemes in the spellings of words. Graphemes may consist of one letter, for example, P, T, K, A, N, or multiple letters, CH, SH, -CK, EA, -IGH, each symbolizing one phoneme.

Snow, Burns, and Griffin (1998) define phonemes as the speech phonological units that make a difference to meaning. Thus, the spoken word rope is comprised of three phonemes: /r/, /o/, and /p/. It differs by only one phoneme from each of the spoken words, soap, rode, and rip.

Phonemic awareness refers to the ability to focus on and manipulate phonemes in spoken words. Phonemic awareness is the insight that every spoken word can be conceived as a sequence of phonemes. Because phonemes are the units of sound that are represented by the letters of an alphabet, an awareness of phonemes is key to understanding the logic of the alphabetic principle and thus to the learnability of phonics and spelling (Snow, Burns, & Griffin, 1998).

Phonology/ Phonological Awareness

Snow, Burns, and Griffin (1998) define the terms phonology and phonological awareness as follows:

The term phonology or phonological refers to the sound structure of speech and, in particular, to the perception, representation, and production of speech sounds. As such, the phonological aspects of language include its prosodic dimensions—intonation, stress, and timing—as well as its articulatory units, including words, syllables, and phonemes. Phonological awareness is the ability to attend explicitly to the phonological structure of spoken words, rather than just to their meanings and syntactic roles. This metalinguistic skill involves treating language as the object of thought, rather than merely using language for communication. Phonological awareness is a more inclusive term than phonemic awareness and refers to the general ability to attend to the sounds of language as distinct from its meaning.

Phonics Instruction with Special Needs Students

There have been a lot of studies on phonics instruction since 1967. However, not much research was conducted with students with special needs. The data presented in this article cover only the major findings of the research over 50 years to show how little change there has been in research in this area (Stahl, 2001). The following inquiries will illustrate how little has been changed in research in this area. For instance, the experimental study conducted by Foorman, Fletcher, Francis, Schatschneider, and Mehta (1998), contrasted the effects of four different beginning reading programs with first and second-grade struggling readers eligible for Title 1 services. The first treatment, direct code, involved direct synthetic phonics instruction combined with practice in decodable texts. Instruction involved direct teaching of letter sounds, blending instruction, and practice using small storybooks containing a high percentage of decodable

words. The second treatment, embedded code, was based on Hiebert, Colt, Catto, and Gary's (1992) program involving teaching of a set of phonograms matched to practice in predictable trade books. They found that the direct code approach was clearly superior to the other approaches in measures of phonological awareness and decoding.

The Foorman, Fletcher, Francis, Schatschneider, and Mehta (1998) study was not the only large-scale study during this period supporting the importance of early and systematic phonics instruction. Studies in the United States (Vellutino & Scanlon, 1988; Vellutino, Scanlon, Sipay, & Small, 1996), in Great Britain (Johnston & Watson, 1997), and in Ontario (Sumbler & Willows, 1998) have all examined the effects of synthetic phonics instruction with large numbers of children. The National Reading Panel (2000) reviewed a large corpus of studies using meta-analytic techniques. Studies were selected by a carefully conscribed set of criteria, limiting review to research that was quantitative and published in peer-reviewed journals. They found the following:

- Phonics instruction produced significant effects on measures of achievement. These effects were most pronounced on measures of decoding and reading non-sense words, and less so on measures of oral reading and reading comprehension. However, significant effects were found on measures of comprehension as well as isolated word reading.
- Phonics instruction was more effective in kindergarten and first grade than in the upper grades.
- Phonics instruction was effective for struggling readers in the early grades, but did not produce significant effects for older children with reading problems.

- There were no significant differences between different approaches to teaching phonics—synthetic, phonogram-based, or eclectic.

Stahl (2001) suggests that the links between the child's development of spoken language and the child's subsequent development of literacy are becoming increasingly well understood. In particular, the child's phonological development—the progression in representing in the brain the speech units that make up different words—is now recognized to play a causal role in the acquisition of literacy. Stahl further concludes that the child's awareness of the phonology of his or her language is one of the most important predictors of that child's progress in learning to read and to spell.

For students with learning disabilities, phonics instruction procedures are intended to make learning to read easier by breaking complex tasks into their component skills, teaching these components, and demonstrating to students how these are combined. This simplification of complex tasks is particularly important for instructionally naïve students, but can also accelerate the learning of instructionally sophisticated students if used appropriately. It also advocates look to improvements in teaching methodology. There are three critical components of phonics instruction—organization of instruction, program design, and teacher preparation techniques.

Phonics Instruction: Strengths and Limitations

What is the best way to teach children to read? This debating question has been a critical issue because there is clearly a need for drastic improvement in the way schools do this essential job. Phonics approach is a recommended instruction that I believe can help children to learn to read effectively. There are many reasons to support why phonics instruction is essential.

In 1950's, in Rudolf Flesch's best-selling book *Why Johnny Can't Read*, Flesch concluded that reading programs that include systematic, intensive phonics instruction work better than those that do not. Let's examine what Flesch wrote in a letter to his daughter in 1955, after teaching his grandson to read:

“Since I started to work with Johnny, I have looked into this whole reading business. I worked my way through a mountain of books and articles on the subject, I talked to dozens of people, and I spent many hours in classrooms, watching what was going on. What I found is absolutely fantastic. The teaching of reading – all over the United States, in all the schools, in all the textbooks, -- is totally wrong and flies in the face of all logic and common sense. Johnny couldn't read until half a year ago for the simple reason that nobody ever showed him how.”

One major argument claimed by Flesch is that when children learn the mechanics of reading, and when they are through, they can read, look, and say words differently. If they are taught to read before they have learned the mechanics—the sounds of the letters, it is like learning to drive by starting your car and driving ahead. What Flesch meant above is that we should teach children to read by first learning the alphabet, then the sounds of each letter, how they blend into syllables, and how those syllables make up words. By this method, they are taught that English spelling is logical and systematic, and that to become a fluent reader it is necessary to master the alphabetic code in which English words are written, to the point where the code is used automatically with little conscious thought given to it. Once a child learns the mechanics of the codes, attention can be turned to more advanced content. It seldom occurs to teachers to give children word lists to read, or to make beginning readers

memorize whole words before learning the components of those words.

The phonics approach tends to build up the solid foundation of the sound system in English for beginning learners to internalize. By this method, children will develop their own literacy abilities by applying it to construct meaningful literacy knowledge by their own. This approach subsequently supports children to learn a language systematically from the smallest part to the whole. In other words, phonics approach believes that children will be able to read effectively if they can master the mechanical skills of the sound system of the English language, and use that knowledge to construct meaning from the print.

However, phonics instruction is limited in that it does not support children to expose to interesting reading and writing at the expense of systematically teaching specific reading and writing skills. In other words, it does not encourage young children to recite along with the teachers as the teachers read aloud from entertaining big-print books. Students may lack motivation and attention to read and write so teachers must be aware of this weakness and try to make the instruction more stimulating. By nature, children need both direct skills instruction and exposure to interesting reading. Although understanding letter-sound correspondence is indispensable to skilled reading, effective instruction should also offer a supportive and tolerant atmosphere to learn to read. In addition, some people might argue that sounding out words is too cumbersome for human mind to process every letter of every word; as a consequence, phonics alone is not sufficient to promote strong reading skills. This is because in reality, learning to read and write takes place within a social and political context (Gass & Selinker, 2001). To clarify, in addition to the cognitive and linguistic factors, there are social, cultural, identity, and political concerns that affect the language literacy development (Hakuta, 1990). When considering how to

deal with classroom issues of ethnicity, culture, gender, and other differences among students, “teachers must create an environment that ensures that all learners see people from their identity group reflected positively in the instructional materials, pictures, books, and videos used in the classroom and throughout the school” (Vogt & Shearer, 2003, p. 118). These factors have powerful effects on self-esteem and motivation that affect the literacy development (Vogt & Shearer, 2003).

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References

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Aukerman, R. C. (1981). *The basal reader approach to reading*. New York: Wiley.
- Bernhardt, E. B. (2000). Second-language reading as a case study of reading scholarship in the 20th century. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 791-811). Mahwah, NJ: Lawrence Erlbaum.

- Bear, D. R., Templeton, S., Invernizzi, M., & Johnston, F. (1996). *Words their way: Word study for phonics, vocabulary and spelling instruction*. Upper Saddle River, NJ: Merrill.
- Chall, J. S. (1967). *The academic achievement challenge: What really works in the classroom*. New York: Guilford Press.
- Cunningham, P. M., & Cunningham, J. W. (1998). Making words: Enhancing the invented spelling-decoding connection. *The Reading Teacher*, 46, 106-115.
- Dahl, K. L., Sharer, P. L., Lawson, L. L., & Grogran, P. R. (1999). Phonics instruction and student achievement in whole language first-grade classrooms. *Reading Research Quarterly*, 34, 312-341.
- Flesch, R. (1955). A new readability yardstick. *Journal of Applied Psychology*, 32, 221-233.
- Foorman, B. R., Fletcher, J. M., Francis, D. J., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, 90, 37-55.
- Gass, S. M., & Selinker, L. (2001). *Second language acquisition: An introductory course*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Hakuta, K. (1990). *Bilingualism and bilingual education: A research perspective*. Washington, DC: National Clearinghouse on Bilingual Education.
- Harris, T., & Hodges, R. (Eds.). (1995). *The literacy dictionary*. Newark, DE: International Reading Association.
- Hiebert, E., Colt, J. M., Catto, S. L., & Gary, E. C. (1992). Reading and writing of first-grade students in a restructured Chapter 1 program. *American Educational Research Journal*, 29(3), 545-572.
- Hurford, D. P., Darrow, L. J., Edwards, T. L., Howerton, C. J., Mote, C. R., Schauf, J. D., & Coffey, P. (1993). An examination

- of phonemic processing abilities in children during their first-grade year. *Journal of Learning Disabilities*, 26(3), 167-177.
- Johnston, R. S., & Watson, J. (1997). Developing reading, spelling, and phonemic awareness skills in primary school children. *Reading*, 31(2), 37-40.
- National Reading Panel (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. Washington DC: National Institute of Child Health and Development (www.nationalreadingpanel.org).
- Routman, R. (1998). *Literacy at the crossroads*. Portsmouth, NH: Heinemann.
- Smith, S. B., Simmons, D. C., & Kameenui, E. J. (1998). Phonological awareness: Research bases. In D. C. Simmons, & E. J. Kameenui (Eds.), *What reading research tells us about children with diverse learning needs: bases and basics* (pp. 61-122). Mahwah: Lawrence Erlbaum Associates.
- Snow, C. E., Burns, S. M., Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, D. C.: National Academy Press.
- Stahl, S. (2001). Teaching phonics and phonological awareness. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp.333-343). New York: Guilford Press.
- Sumbler, K., & Willows, D. (1998). *Time management: Monitoring activities in Jolly Phonics and control classrooms*. Paper presented at the annual meeting of the National Reading Conference, New Orleans, LA.
- Vellutino, F. R., & Scanlon, D. M. (1998). Phonological coding, phonological awareness, and reading ability: Evidence from a longitudinal and experimental study. In K. E. Stanovich (Ed.), *Children's reading and the development of phonological*

awareness (pp. 7-119). Detroit, MI: Wayne State University Press.

Vellutino, F. R., Scanlon, D. M., Sipay, E. R., & Small, S. G. (1996). Cognitive profiles of difficult-to-remediate and readily remediated poor readers: Early intervention as a vehicle for distinguishing between cognitive and experiential deficits as basic causes of specific reading disability. *Journal of Educational Psychology, 88*, 601-638.

Vogt, M. E., & Shearer, B. A. (2003) *Reading specialists in the real world: A sociocultural view*. Boston, MA: Pearson Education, Inc.